

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0003] with the following amended paragraph:

[0003] Many editors also provide advanced features that can make the programmer's work easier. These advanced features include such things as syntax coloring, intellisense, and validation. Syntax coloring generally involves coloring or otherwise altering the elements of a document to distinguish the various elements of the program or markup language syntax. Intellisense, also known as statement completion, occurs when the editor hints or is able to complete a partially typed expression. Validation occurs when the editor is able to detect invalid or obsolete constructs and without invoking the actual compiler. Each of these and other advanced features made available to existing editors are well known in the art.

Please replace paragraph [0004] with the following amended paragraph:

[0004] One problem with advanced editing tools and corresponding editors, however, is that they are not currently configured to extend the advanced editing features, such as validation, syntax coloring, and intellisense, to code segments that are written in different languages, even if they belong to the same file. One reason for this is that the advanced tools work on the assumption that the programming file consists entirely of source code written in a single programming language. This, however, can be a problem when considering the current movement in computer programming. For instance, existing Microsoft ASP.NET technology currently allows Web pages to be developed that include both HTML markup as well as text in a compiler programming language such as Visual Basic or C#.

Please replace paragraph [0006] with the following amended paragraph:

[0006] Yet another problem with editing multilanguage documents is that certain programming technologies, such as ASP.NET permit omissions in the source code, such as, for example, the omission of class and namespace declarations, but such omissions do not permit the source code to be processed by ~~a~~the language compiler. Because the editor being used to edit the document may not recognize the secondary languages and omissions present in the secondary languages, however, the omissions are not readily apparent and are not automatically fixed by the editor, thereby increasing the burden on the programmer to develop and process the code.

Please replace paragraph [0020] with the following amended paragraph:

[0020] The present invention relates to methods and systems for enabling a programmer to develop multilanguage documents from a single editor, and while enabling the programmer to utilize functionality that is provided by secondary editors that correspond to the different programming languages that are present in the document.

Please replace paragraph [0026] with the following amended paragraph:

[0026] In certain embodiments of the invention, the secondary editors are also configured to generate secondary documents that are contemporaneously modified by the secondary editors in response to user input received by the primary editor and replicated by the secondary editors. These secondary documents are not presented to the user for viewing and can therefore be considered "invisible" documents.

Please replace paragraph [0039] with the following amended paragraph:

[0039] Once the different code segments are identified (act 230), they are sent to the appropriate secondary editors that are configured to handle the specific syntax and programming elements of

the respective code segments. For example, if a segment of code is identified as a Visual Basic (VB) code segment it will be sent to a VB source code editor, as reflected in Figures 3 and 4, as described below. Sending the code segments to the secondary editors can include opening the secondary editors. In ~~some circumstance~~circumstances, sending the code segments to the corresponding editor (act 240) can also include sending a code segment to the primary editor when the primary editor is specifically configured to develop code written in the particular language of the identified code segment.

Please replace paragraph [0040] with the following amended paragraph:

[0040] In some instances, the identified code segments cannot be sent straight to the corresponding editors, however, because certain necessary elements of the source code segment may be missing from the identified code segment. For example, code written in script blocks in ASP.NET Web pages does not necessarily include namespace or class namespace declarations. Likewise, declarations of certain variables may be omitted from the identified code segment. Therefore, it may be desirable for the primary editor to evaluate the file structure, directives, and the declarations made throughout the multilanguage document to rebuild a complete source code segment, when necessary, that can be effectively utilized by the corresponding secondary editor. By way of example, page directives can be analyzed to determine the name of the programming language and class names. HTML markup can be parsed to ~~find~~-identify server-side controls. Likewise, user control identifiers can be used to declare missing class member variables.

Please replace paragraph [0044] with the following amended paragraph:

[0044] Replicating the edits to the secondary document can occur incrementally in varying degrees of granularity, such as, for example, line by line, term by term, and so forth. According to one

embodiment, the edits are replicated ~~in~~ on a key stroke by key stroke basis to increase the responsiveness to the user edits.

Please replace paragraph [0050] with the following amended paragraph:

[0050] The view coordinator can also include modules for linking the coordinates (e.g., line, column, indentation, etc.) of the code segments in the multilanguage document with the coordinates of the code segments in the secondary documents so that changes ~~make~~ made in one of the documents can appropriately be made in the other document even though the changes may occur in different line numbers. By way of example, the view coordinator can mark sections of the original code that is presented in the primary view as well as sections of the secondary (invisible) file with markers that can be identified at a later time. According to one embodiment, the markers are language specific. For example, Visual Basic, C# and other ASP.NET compatible languages can use markers utilizing the #ExternalSource directives format. An example of marking in this manner is reflected in Figures 3 and 4 below.

Please replace paragraph [0063] with the following amended paragraph:

[0063] In summary, it should now be appreciated from the foregoing descriptions and examples that the present invention extends broadly to any embodiment in which an editor leverages and ~~provide~~ provides the functionality from other editors and without requiring a user to explicitly open or interface with the secondary editors.